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EXAMINER	
CHOW, CHIH CHING	

ART UNIT	PAPER NUMBER
2192	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/807,694	OKKONEN ET AL.	
	Examiner	Art Unit	
	Chih-Ching Chow	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 May 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 March 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/24/04, 07/20/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to amendment dated May 31, 2005.

2. Per Applicants' request, the Specification, Claims 1, 2, 4, 8, 10, 11, 12, 14, 16, 17, 20, 23, 25, 29, 30, and 31 have been amended. Claims 1-31 remain pending.

Response to Amendment

3. Applicants' amendment dated 05/31/2005, responding to the 02/28/2005 Office Action provided in the objection of Specification. The examiner has reviewed the updated Specification respectfully.

4. The objection to the Specification is maintained since paragraphs 0002, 0003 and 0004 don't apply to this application (NO PCT documentation has been submitted with the current application), they should be removed.

5. Applicants' amendment for Claims 1, 2, 4, 8, 10, 11, 12, 14, 16, 17, 20, 23, 25, 29, 30, and 31 have been fully considered respectfully by the examiner but they are not persuasive.

Response to Arguments

6. Applicants' argument dated 05/31/2005, responding to the 02/28/2005 Office Action provided in the 35 USC § 112 rejections. The Examiner has reviewed the argument under the Rejections of Claims (pages 11-13 of REMARKS) respectfully; the 35 USC § 112 rejections are hereby withdrawn.

7. Applicants' argument dated 05/31/2005, responding to the 02/28/2005 Office Action provided in the Drawing Objections, the Examiner has reviewed the argument under the Drawing Objections (pages 10-11 of REMARKS) respectfully; the

Examiner is **maintaining the Drawing Objection** against the Claims 5 and 20. The reason that the objection is maintained is because that even the OTASP and OTAPA are well-known techniques for wireless service for various air interfaces, however neither of the figures specifically indicated 'wireless' communication, even the Figure 1, the 'electronic device network', could be built upon a wired communication network – therefore, the drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the Claims 5 and 20 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. The objection to the drawings will not be held in abeyance.

8. Applicants' arguments for Claims 1-31 have been fully considered respectfully by the examiner but they are not persuasive.

9. Applicants' arguments are basically in the following points:

a. For Claim 1, "Aghera reference does not teach, suggest, or disclose, for example, an electronic device network, the network comprising a plurality of servers, and a plurality of electronic devices communicatively coupled to at least one of the plurality of servers" (REMARKS, bottom of page 13 to top of page 14).

Examiner's Response: See Aghera's FIG. 1 and FIG. 2, Aghera's teaching shows an 'electronic device network', which includes clients and servers (it's inherited from the concept of a 'network', a network can accommodate more than one client and server). Further, see Aghera's paragraph 0024, the item 10 is a patch server, and item 12 are wireless electronic devices, and item 14 is a network connecting all these devices – therefore, Aghera's disclosure does teach an 'electronic device network'.

b. The Aghera reference is silent with regard to a plurality of update agents in an electronic device" (see REMARKS, last sentence of page 14, 1st paragraph).

Examiner's Response: In response to applicant's argument, Aghera teaches "patching APIs"; which install the patch on the device, see Aghera's paragraph 0055. The patching APIs serves the same function as the 'update agents' recited in current application.

c. For Claim 17, "Aghera reference does not teach, suggest, or disclose, for example, a method employing a plurality of update agents in an electronic device in an electronic device network", REMARKS page 14, 3rd paragraph.

Examiner's Response: See item a. above.

10. The Examiner is maintaining the Specification, Drawings objections, 35 USC § 102, and the 35 USC § 103 Rejections. For the Applicants' convenience they are listed as following, with the amendments requested by the Applicants.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

12. Claims 1-7, 9-11, 15-20, 22, and 24-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Parixit Aghera et al., US2004/0098715A (hereinafter "Aghera").

CLAIM	Aghera
1. An electronic device network, the network comprising: a plurality of servers; and a plurality of electronic devices communicatively coupled to at least one of the plurality of servers, each of the electronic devices being adapted to employ at least one of a plurality of update agents resident in the electronic device to update one of software and firmware in the electronic device, wherein the electronic device is also adapted to provision the plurality of update agents with parameters and data used to facilitate update operations in the electronic device.	Aghera teaches an electronic device with servers communicate via network, and the update agents reside in the electronic devices, see Aghera FIG. 1 and FIG 2, and paragraph 0024, "simplified diagram showing elements involved in OTA (Over The Air) software management is provided in which a **patch server** 10 communicates with a **plurality of wireless electronic devices** 12 (one of which is shown) by way of a wireless **network** 14.", paragraph 0055, "At step 136, the patch agent application 106 uses the patching APIs 108 to install the patch on the device 12." And paragraph 22, "A patch **server** (*update server*) hosts the patch software. The patch software is downloaded (*via network*) by a **patch agent** (*update agent*) application running on the **mobile device** *(reside in the electronic device)*. The **patch server** initiates the patch download by sending a notification message to the mobile device. The notification message invokes the **patch agent** application on the mobile device. The **patch agent** application sends negotiation **parameter values** *(parameters and data)* to the **server** and the server determines whether the mobile device requires a particular patch and if the device has enough resources to download and install the patch. The **patch agent** carries out an installation process (*update operations*), which replaces an existing patch with a new patch *(provisioned data)* in a **non-volatile memory** of the mobile device."
2. The network according to claim 1, wherein the electronic device comprises	For the feature of claim 1 see claim 1 rejection. For the rest of claim 2 feature

random access memory and non-volatile memory, wherein the non-volatile memory comprises a plurality of components, the plurality of components comprising at least one of the following: an update application loader, the plurality of update agents, firmware, an operating system (OS), and provisioned data, wherein the provisioned data comprises update agent provisioning information and a number assignment module.

see Aghera's FIG. 7, Client (mobile device) has a 'Patch **Loader**' (*update application loader*) and a 'Processor Accessible Memory' (**RAM**), see paragraph 44, "The wireless device 12 includes a patch agent application 106, patching APIs 108, a security API 110, a first memory 112, such as an EPROM, EEPROM, UV-EPROM, Flash, and the like, a **patch loader** 114, and a second, processor accessible, memory 116." Also see Aghera's FIG. 4 and paragraph 42, "The native platform library 86 includes APIs (*update agents*) provided by **OS system** calls and native libraries (*provisioned data*). The patch profile native implementation 78 uses the native libraries and **OS** system calls to perform installation specific tasks, such as flash programming routines for re-programming upgraded DSP software". For 'a number assignment module', see page 8, TABLE 1, "PatchID Unique 2 bytes integer **number assigned** to a particular patch." – there must be software, which assigns the number.

3. The network according to claim 1, wherein the network further comprises at least one of an update server, and a plurality of generators, wherein the generators are adapted to generate updates able to be processed by at least one provisioned update agent in the electronic device, and wherein the update server is adapted to store updates accessible by the plurality of servers.

For the feature of claim 1 see claim 1 rejection. For the rest of claim 3 feature see Aghera paragraph 23, "a patch program database in communication with the patch server application, and a **patch data generator** in communication with the patch program database... the patch data **generator** generates the **downloadable patch programs** by encoding predetermined patch data."

4. The network according to claim 1, wherein the electronic device further comprises a provisioned data unit

For the feature of claim 1 see claim 1 rejection. For the rest of claim 4 feature see Aghera paragraph 31, "The patch

adapted to store information related to an end-user's electronic device subscription, and wherein the provisioned data unit may be programmed during number assignment module programming activity.	profile 42 **stores** downloaded software patches in a Flash or persistent memory (*provisioned data unit*) of the wireless device." Also see FIG. 2.
5. The network according to claim 4, wherein the number assignment module programming activity comprises at least one of over-the-air service provisioning (OTASP) activity and over-the-air parameter administration (OTAPA) activity.	For the feature of claim 4 see claim 4 rejection. Aghera's disclosure is about OTA Service Provisioning and OTA Parameter administration. See Aghera paragraph 22, "The present invention provides a client based software method for upgrading or patching ROM software of a processor of a mobile electronic device by **OTA** downloading patch software to the device and then installing the patch software on the device in a secure manner." Aghera's OTA process may also perform the service provisioning and parameter administration activities.
6. The network according to claim 4, wherein the provisioned data unit is adapted to store at least one of update agent related provisioning information, a universal resource locator of a server used to retrieve updates, and a security key used to authenticate server messages.	For the feature of claim 4 see claim 4 rejection. For the rest of claim 6 feature see Aghera's paragraph 62, "the Terminal Profile 40 contains device specific classes that allow SyncML software to access **device-specific** (*corresponding entry*) functionality such as persistent storage and management operation manipulation to **retrieve** or upgrade data from the storage"; and paragraph 49, "The **security APIs** 110 provide services to other software components to perform these check operations. That is, the **security APIs** 110 check the **authenticity** and integrity of the downloaded patch data using the license file downloaded from the server along with the patch data."

7. The network according to claim 4, wherein each of the plurality of update agents has a corresponding entry in the provisioned data unit.	For the feature of claim 4 see claim 4 rejection. For the 'corresponding entry' see claim 6 rejection.
9. The network according to claim 1, wherein the electronic device is adapted to display a list of available update agents to an end-user and solicit selection of an update agent to be used to update at least one of software and firmware.	For the feature of claim 1 see claim 1 rejection. For the rest of claim 9 feature see Aghera paragraph 26, "an operator can **select** a particular software version of an application to be distributed to a particular type of devices" – this implies that a list of available updates are displayed for the user to do the selection.
10. The network according to claim 1 wherein the electronic device is adapted to invoke an update agent based upon an update currently being processed provided that the update agent is provisioned in the electronic device.	For the feature of claim 1 see claim 1 rejection. Aghera's disclosure is for updating software/firmware in a mobile device.
11. The network according to claim 1, wherein the electronic device may execute an update application loader on reboot, and wherein the update application loader is adapted to invoke a boot initialization code before determining to update the electronic device.	For the feature of claim 1 see claim 1 rejection. For the rest of claim 11 feature see Aghera paragraph 56, "After installation, the patch is activated. The newly installed patch is said to be active only when the patch loader 114 loads the new patch to the processor RAM for execution and the patch agent application is exited, step 148. In one embodiment, activation requires **warm-boot** of the device".
15. The network according to claim 1, wherein the electronic device further comprises an update agent table resident in non-volatile memory, the update agent table containing references to a plurality of update agents currently available and provisioned in the electronic device, the update agent table associating update agent names, update agent address locations, types of	For the feature of claim 1 see claim 1 rejection. For the rest of claim 15 see Aghera FIG. 9 and FIG. 10. All the patch information (*provisioned data*) can be put in the patch table.

updates that the update agents are adapted to process, and provisioning status of the update agents for all available update agents in the electronic device.

16. The network according to claim 1, wherein the electronic device comprises at least one of a plurality of mobile electronic devices, and wherein the plurality of mobile electronic devices comprise at least one of the following: a mobile cellular phone handset, a personal digital assistant, a pager, an MP3 player, and a digital camera.

For the feature of claim 1 see claim 1 rejection. Aghera's disclosure does not limit to a certain mobile electronic device, an example is shown in FIG. 1, which is a cellular phone handset.

17. A method employing a plurality of update agents in an electronic device in an electronic device network, the method comprising:
communicatively coupling a plurality of electronic devices to at least one of the plurality of servers;
employing at least one of a plurality of update agents resident in the electronic device to update one of software and firmware in the electronic device; and
provisioning the plurality of update agents with parameters and data used to facilitate update operations in the electronic device.

Aghera's disclosure definitely employs a 'method' which does all the features in recited in claim 17. See claim 1 rejection.

18. The method according to claim 17, further comprising generating updates able to be processed by at least one provisioned update agent in the electronic device and storing updates in an update server.

For the feature of claim 17 see claim 17 rejection. For the rest of claim 18 feature see claim 1 and claim 3 rejections.

19. The method according to claim 17, further comprising:
storing information related to an end-

For the feature of claim 17 see claim 17 rejection. For the rest of claim 19 feature see claim 4 rejection.

user's electronic device subscription; and programming a provisioned data unit during number assignment module programming activity.	
20. The method according to claim 19, wherein the number assignment module programming activity comprises at least one of the following: over-the-air service provisioning (OTASP) activity and over-the-air parameter administration (OTAPA) activity.	For the feature of claim 17 see claim 17 rejection. For the rest of claim 20 feature see claim 5 rejection.
22. The method according to claim 19, further comprising providing each update agent an entry in a provisioned data unit.	For the feature of claim 19 see claim 19 rejection. For the rest of claim 22 feature see claim 7 rejection.
24. The method according to claim 17, further comprising: displaying a list of available update agents to an end-user; and soliciting selection of an update agent to be used to update at least one of software and firmware.	For the feature of claim 17 see claim 17 rejection. For the rest of claim 24 feature see claim 9 rejection.
25. The method according to claim 17, further comprising invoking an update agent based upon an update currently being processed provided that the update agent is provisioned in the electronic device.	For the feature of claim 17 see claim 17 rejection. For the rest of claim 25 feature see claim 10 rejection.
26. The method according to claim 17, further comprising executing an update application loader on reboot of the electronic device and invoking a boot initialization code before determining to update the electronic device.	For the feature of claim 17 see claim 17 rejection. For the rest of claim 26 feature see claim 11 rejection.
27. The method according to claim 17, further comprising:	For the feature of claim 17 see claim 17 rejection. For the rest of claim 27 feature

storing update agent provisioning information in the electronic device; and hosting updates to be downloaded with update agents provisioned in the electronic device.	see claim 1 rejection.
28. The method according to claim 17, further comprising determining an address location of a provisioned update agent, wherein determining comprises one of computing and accessing an entry in a table.	For the feature of claim 17 see claim 17 rejection. For the rest feature of claim 28 see Aghera paragraph 58, "An **index** of all DSP patches (*address location*) stored in the DSP patch blocks 162 is maintained in the PVT 164. The PVT 164 contains a DSP Patch Version for a particular patch followed by memory address of DSP Patch Data for that particular patch, as shown in FIG. 10".
29. The method according to claim 17, further comprising: authenticating updates during download of the updates and during update activity, using a security key; employing a separate security key to authenticate updates by a download agent and by the at least one of a plurality of update agents; and employing the security key for at least one of the following: secure communication, encryption, and decryption of data and messages, during communication with external systems.	For the feature of claim 17 see claim 17 rejection. For the rest of claim 29 feature see claim 6 rejection.
30. The method according to claim 17, further comprising mapping at least one of update agent names, update agent address locations, types of updates that the update agents are adapted to process, and provisioning status of the update agents for all available update agents in the electronic device.	For the feature of claim 17 see claim 17 rejection. For the rest of claim 30 feature see claim 15 rejection.
31. The method according to claim 17,	For the feature of claim 17 see claim 17

wherein the electronic device comprises at least one of the following: a plurality of mobile electronic devices, and wherein the plurality of mobile electronic devices comprise at least one of a mobile cellular phone handset, a personal digital assistant, a pager, an MP3 player, and a digital camera.	rejection. For the rest of claim 31 feature see claim 16 rejection.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14. Claims 8 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US2004/0098715A by Parixit Aghera et al. (hereinafter "Aghera"), in view of US Patent No. 5,708,776 by Dan Kikinis (hereinafter "Kikinis").

CLAIM	Aghera / Kikinis
8. The network according to claim 1, wherein one of the plurality of update agents is designated a primary update agent and another of the plurality of update agents is designated as a secondary update agent, and wherein the primary update agent is used to perform updates during one of power up and reboot of the electronic device and the secondary update agent is used to perform updates not requiring electronic device rebooting.	For the feature of claim 1 see claim 1 rejection. Aghera teaches all aspects of claim 8, but he does not mention 'Primary update agent and secondary update agent' specifically, however, Kikinis teaches it in an analogous prior art. In Kikinis column 1, lines 53-59, "a **primary boot partition** on the mass storage device, comprising primary operating software and primary application software for execution by the CPU in **booting** the network appliance and placing it in operation performing its application; a **secondary boot partition** on the mass storage device, comprising secondary operating software and secondary application software; and an

	automatic recovery routine on the non-volatile storage device." It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to supplement Aghera's disclosure of the Software management for mobile device over the air by using Primary Update/Secondary Update taught by Kikinis, for the purpose of initiating necessary reboot (Kikinis Abstract, line 3).
23. The method according to claim 17, further comprising: designating a primary update agent and a secondary update agent; using the primary update agent to perform updates during one of the following: power up and reboot of the electronic device; and using the secondary update agent to perform updates not requiring electronic device rebooting.	For the feature of claim 17 see claim 17 rejection. For the rest of claim 19 feature see claim 8 rejection.

15. Claims 12-14, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US2004/0098715A by Parixit Aghera et al. (hereinafter "Aghera"), in view of US Patent No. 6,493,871 by Thomas D. McGuire (hereinafter "McGuire").

CLAIM	Aghera / McGuire
12. The network according to claim 1, further comprising update agent provisioning information stored in the electronic device, the update agent provisioning information comprising at least one of the following: a device server URL, an index of provisioned update agents, a security key, and electronic device related information, wherein the device server URL provides references to servers hosting updates to be downloaded, and wherein the update are compatible with update agents currently	For the feature of claim 1 see claim 1 rejection. Aghera teaches all aspects of claim 12, but he does not mention 'URL' specifically, however, McGuire teaches it in an analogous prior art. In McGuire's column 11, lines 17-20, "In the present example, the **URL** ("uniform resource locator", or Internet address) to submit the request to is also specified in the UPDATE.INF shown in FIG. 4 in the [Version] section, as the value named 'SourceFilesURL.'" It would have been obvious to a person of

available and provisioned in the electronic device.	ordinary skill in the art at the time of the invention was made to supplement Aghera's disclosure of the Software management for mobile device over the air by using URL taught by McGuire, for the purpose of downloading resource from the internet (McGuire, column 11, line 18).
13. The network according to claim 12, wherein the index of provisioned update agents provides an index value used to compute an address location of a provisioned update agent, and wherein the index of provisioned update agents provides an index to a table containing an address for an update agent in non-volatile memory the electronic device.	For the feature of claim 12 see claim 12 rejection. For the rest feature of claim 13, see Aghera paragraph 58, "An **index** of all DSP patches (*address location*) stored in the DSP patch blocks 162 is maintained in the PVT 164. The PVT 164 contains a DSP Patch Version for a particular patch followed by **memory address** of DSP Patch Data for that particular patch, as shown in FIG. 10".
14. The network according to claim 12, wherein the security key is used to authenticate updates during download of updates and during update activity, wherein a separate security key is employed to authenticate updates by a download agent and by the update agent, and wherein the security key is employed for at least one of the following: secure communication, encryption, and decryption of data and messages during communication with external systems.	For the feature of claim 12 see claim 12 rejection. For the rest feature of claim 14 see claim 6 rejection.
21. The method according to claim 19, wherein the programming further comprises storing update agent related provisioning information, a universal resource locator of a server used to retrieve updates, and a security key used to authenticate server messages.	For the feature of claim 19 see claim 19 rejection. For the rest of claim 21 feature see claims 6, 12 (URL) and 13 rejections.

Conclusion

16. The following summarizes the status of the claims:

35 USC § 102 rejection: Claims 1-13, 15-18

35 USC § 103 rejection: Claim 14

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire ***THREE MONTHS*** from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Ching Chow whose telephone number is 571-272-3693. The examiner can normally be reached on 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on 571-272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature of relating to the status of this application should be directed to the **TC2100 Group receptionist: 571-272-2100**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chih-Ching Chow

Examiner

Art Unit 2192

Date 08/04/05

CC

ANTONY NGUYEN-BA
PRIMARY EXAMINER